## Contributions to Health Insurance Premiums:

## When Does the Employer Pay 100 Percent?

Alice M. Zawacki, M.B.A., Ph.D. and Amy K. Taylor, Ph.D.

Alice M. Zawacki
Economist
U.S. Census Bureau
Center for Economic Studies
4700 Silver Hill Road, Stop 6300
Washington, DC 20233-6300

Phone: 301-763-1862 Fax: 301-457-1235

E-mail: Alice.M.Zawacki@census.gov

Amy K. Taylor, Ph.D.
Senior Economist

Agency for Healthcare Research and Quality
John M. Eisenberg Building
540 Gaither Road
Rockville, MD 20850
301-427-1660

Fax: 301-427-1276

E-mail: Amy.Taylor@ahrq.hhs.gov

### Disclaimer:

The analysis and results presented in this paper are attributable to the authors and do not necessarily reflect concurrence by the Center for Economic Studies, U.S. Census Bureau or the Agency for Healthcare Research and Quality. This paper has undergone a more limited review by the Census Bureau than official Census publications. It has been screened to ensure that no confidential data are revealed.

Abstract

While many employers have cut back their health insurance

benefits in response to rising costs, a sizable share of

employers continue to pay 100 percent of premiums.

the 1997-2003 Medical Expenditure Panel Survey (MEPS) -

Insurance Component, we examine what share of the market

these employers represent and the characteristics that

distinguish them from other employers. We found that most

of the establishments that paid 100 percent of premiums

were young, small, single-units, with a relatively high

paid workforce. Fully paid plans generally required

referrals to see specialists, did not cover pre-existing

conditions or outpatient prescriptions, and had no maximum

limit set for annual out-of-pocket expenses.

Keywords: employer-sponsored health insurance,

contributions, premiums

2

#### INTRODUCTION

The rise in medical care costs in the United States over the past decade has been accompanied by an increase in health insurance premiums. 1 Higher insurance costs create budgetary concerns for employers, since health insurance benefits represent such a large component of employee compensation. Employers are the major source of health insurance in this country, and they often try to pass some of the increased insurance costs on to employees through higher copayments, coinsurance, and deductibles<sup>2</sup> and/or higher employee contributions for health insurance premiums. 3 A series of articles by Jon Gabel and colleagues have monitored trends in the employment-based health insurance market. Overall, they found as premiums continued to rise from 2001 to 2005, many firms cut back the generosity of their health insurance offerings, including the amount they contributed to premiums for their employees.

Employer contribution levels for health insurance vary across firms, and tight labor markets, unionization, and political pressures have often influenced the share of premiums paid by employers and employees.<sup>5</sup> The exclusion of employer paid health insurance from employee taxable

income is another factor that influences employer contributions to health insurance premiums. 6

However, despite concerns about increasing health insurance premiums, some employers continued to pay 100% of the premium cost for employees. In 2003, 44 percent of private sector establishments offering health insurance paid 100% for at least one single policy, while 25 percent paid 100% for family policies. And, the percent of employees in establishments offering insurance that paid the full cost of health insurance premiums for single coverage still stood at 28 percent in 2003, although it was down from 35 percent in 1997. The percent of employees with fully paid family coverage decreased from 17 percent in 1997 to 14 percent in 2003.

This paper will examine those establishments that continued to pay 100 percent of health insurance premiums for their employees, despite increased medical care and insurance costs. Research has shown that workers are more sensitive to out-of-pocket than total health insurance premiums, so that 100 percent payment by employers would be particularly valued. While employee contributions on average are rising and although economists debate the share of employer paid premiums that are ultimately shifted back to workers in the form of reduced wages, the goal of this

analysis is to identify the characteristics of those establishments that paid 100 percent of health insurance premiums and the policies they offered.

#### DATA AND METHODS

The Medical Expenditure Panel Survey (MEPS) Insurance Component (IC) has been surveying employers annually on their health coverage since 1996. It is sponsored by the Agency for Healthcare Research and Quality and is conducted by the U.S. Census Bureau. The MEPS-IC includes both state and local government units and the private sector. Only data for private establishments is used in this analysis.

Because the unit of analysis in the MEPS - IC is the establishment (a particular workplace or location), the analysis in this paper is establishment-based. Surveying establishments versus firms (which may have multiple establishments) provides better estimates of health coverage because benefits can vary within firm by location because of differing state laws that regulate health insurance. Between 25,000 and 35,000 establishments are surveyed each year. The estimates are weighted to be nationally representative. 11,12

The information collected in the MEPS-IC on establishments is relatively rich. Data is provided on employer characteristics, including measures for establishment size, establishment ownership type, industry, location, and the age of the firm. Information on the percent of the workforce that is female, over the age of 50, unionized, working part-time, and earning low/medium/high wages is also included. Each establishment or reporting unit in the MEPS - IC provides information about the health insurance plans they offer. The MEPS - IC collects data on premiums for single and family coverage, contributions by employers and employees, provider type, plan enrollment, deductibles, copayments, and indemnification. 13

Our analysis distinguishes between employer contributions to self-only coverage (for the employee) versus coverage that includes others (which we term here family). We also distinguish between coverage involving the offer of only a single plan versus multiple plans.

Since the number of plans offered is likely correlated with different employer characteristics (e.g., number of employees), we separate establishments into those offering one or more than one plan to control for these differences.

Tests of statistical significance accounted for the survey design of the MEPS - IC. All differences discussed in this article were statistically significant at the .05 level.

#### RESULTS

What Share of Establishments Pay 100 Percent of Premiums?

As Exhibit 1 shows, establishments were significantly more likely to pay 100 percent for single coverage than for family coverage. We also see that the percent of establishments paying the full cost declined slightly from 1997 to 2003. Similar to findings for establishments, a significantly higher percentage of workers in all years (1997 through 2003) had premiums fully paid by employers for single coverage than for family coverage.

## What are the Characteristics of These Establishments?

Looking at the characteristics of the workforce in establishments paying the full premium cost of health insurance for their employees (Exhibit 2), we see that establishments with 50 percent or more of their workforce earning a low wage<sup>15</sup> were significantly less likely to pay 100 percent for at least one plan than establishments with a higher paid workforce. Establishments with a higher

percentage of part-time workers were also less likely to pay 100 percent. Finally, most establishments that were unionized were more likely to pay 100 percent of the premiums than establishments that were not.

Exhibit 3 shows that larger establishments were more likely to offer insurance. 17 Establishments with less than ten employees, however, were more likely to pay the full premium cost when they offered only one plan than establishments with more than 1000 employees. This was true for both single and family coverage. We found that single-unit establishments were also more likely to pay 100 percent than multi-unit establishments. 18 The percent of establishments that paid 100 percent by establishment characteristics for 2003 is shown in Exhibit 2. Establishments that are part of firms operating for less than 5 years were significantly more likely to pay 100 percent for single or family coverage for at least one plan than establishments in firms operating for more than 20 years, when the establishment offers more than one plan. We also found that nonprofit establishments were more likely than for-profit establishments to pay 100 percent of the premium cost for at least one plan.

Establishments in the agriculture/fishing/forestry and construction industries were less likely to offer insurance

than those in other industries. <sup>19</sup> Most establishments in these industries, however, were more likely to pay 100 percent when they did offer insurance and more than one health plan. <sup>20</sup> Establishments in the retail industry offering one health plan were the least likely to pay 100 percent of the premium cost for single coverage. In contrast, no one or two industries was seen as being significantly less likely to pay 100 percent among establishments offering family coverage and establishments offering more than one plan.

The percent of establishments that paid 100 percent of health insurance premiums also varied by location.

Establishments in the south were less likely than those in other regions to have paid 100 percent for family coverage, whether the establishment offered one plan or more than one plan. Establishments in the west that offered one plan with single coverage were significantly more likely to pay 100 percent than establishments in other regions.

Establishments located in the northeast, which offered only one plan, were significantly more likely to pay 100 percent for family coverage than those in the rest of the U.S.

Because many of the establishment characteristics examined in the descriptive analysis are highly correlated, we estimated a logistic regression model to estimate the

independent effects of those characteristics on the probability that an establishment paid 100 percent of health insurance premiums for its employees. As can be seen in Exhibit 4, many of the characteristics that were important in describing which establishments offered fully paid insurance remain important in the multivariate analysis. In particular, firm size less than ten was associated with a 23 percent higher probability that an establishment offered fully paid health insurance for single coverage. Further, the regression results show that the effect of unionization is much stronger when other characteristics are held constant; for both single and family plans, unionized establishments were nearly 25 percent more likely to pay the full cost of premiums for their employees.

# Is There a Relationship Between Paying 100 Percent of Premiums and the Characteristics of Plans Offered?

Exhibit 5 shows provider type<sup>21</sup> by employer contributions for single coverage in 2003. The findings are very similar for family coverage. The majority of plans offered at establishments providing health insurance had a mixed provider type arrangement. However, fully paid plans were more likely to have exclusive provider or any

provider arrangements than plans that were not paid 100 percent.

employer contributions for 2003. These characteristics include the plan's provider type arrangement, premiums, self-insured indemnification, whether referrals were required, coverage for pre-existing conditions, coverage for outpatient prescriptions, and out-of-pocket expenses. We found that plans from establishments offering only one plan and paid 100 percent were more likely to have premiums in the highest premium group. Plans from establishments that offered more than one plan and that were paid 100 percent were more likely to have premium group. These findings are true for both single and family coverage.

Exhibit 5 also shows that plans that were fully paid by employers were less likely to be self-insured. In addition, plans that were paid 100 percent by the employer were more likely to require referrals to see a specialist than plans that were not fully paid. Plans from establishments offering one plan and that were paid 100 percent were less likely to cover pre-existing conditions<sup>23</sup> than plans requiring employee contributions towards premiums. Plans with either single or family coverage that

were paid 100 percent at establishments offering only one plan were less likely to cover outpatient prescriptions than other plans. Most plans paid 100 percent were more likely to have no annual out-of-pocket maximum than plans not paid 100 percent. <sup>24</sup>

## DISCUSSION/SUMMARY

Today's headlines reflect concerns over rising health care costs, employers' struggles to contain the cost of health insurance premiums, and the number of working

Americans without health insurance. Despite these concerns many employers continued to pay the full cost of health insurance for their employees from 1997 to 2003.

We found that the provision of employer-sponsored health insurance at no cost to employees varied according to specific workforce, organizational, and plan characteristics. Most of these establishments that paid 100 percent of premium costs for their employees were young, small, single-units, with a higher paid workforce, although large enterprises with strong unions also often paid 100 percent of health insurance premiums (as we have seen with recent labor negotiations, in the auto industry and the NYC transit workers strike for example). 25

Across plans at all establishments offering one or more plan, those that were fully paid were more likely than plans not fully paid by employers to have a fee-for-service or exclusive provider arrangement and were less likely to be self-insured. Fully paid plans from establishments offering one plan were more likely to have premiums in the highest category, while fully paid plans from establishments offering more than one plan were more likely to have premiums in the lowest group. Plans that were fully paid by employers tended to be less generous in terms of benefits. Plans that were paid 100 percent by employers generally required referrals to see specialists, did not cover pre-existing conditions or outpatient prescriptions, and had no maximum limit set for annual out-of-pocket expenses.

Finding that small establishments were more likely to pay 100 percent of premium costs for at least one health plan and that fully paid plans from establishments offering one plan were more likely to have the highest premium costs may relate to insurers' and employers' worries regarding adverse selection. Insurers charge higher premiums for plans with a low percentage of the workforce enrolled, because they are concerned that only the sickest employees with the highest health care costs are participating in the

plan. <sup>26</sup> Small establishments, therefore, may encourage enrollment by fully contributing towards the cost of the plan in order to lower premium costs. Paying the full cost of an employee's insurance premiums provides an incentive to participate in the firm's health insurance plan.

Researchers have shown that employee cost sharing affects enrollment in health plans. <sup>27</sup> Further, small establishments might not have a choice because some insurers require that all workers be covered as a condition of offering insurance at all. <sup>28</sup> Some state laws relating to the sale of small employer health insurance policies allow insurers to establish employer contribution rules in order to meet minimum participation requirements. <sup>29</sup>

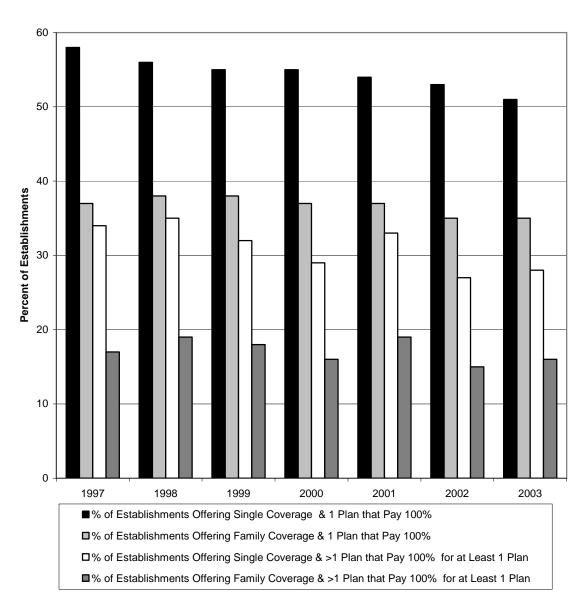
We have seen that the percent of establishments that paid the full cost of health insurance premiums for employees declined slightly between 1997 and 2003. As health care costs inevitably rise in the future, it will be interesting to see if this behavior continues. In future research, we also will be pursuing the issue of what is happening to the characteristics of fully paid health insurance plans and the impact of state laws regulating the market for small employer health insurance. We will continue to monitor the benefits to employees and see whether health insurance is becoming more costly in terms

of higher copayments, coinsurance, and deductibles when employers pay 100 percent of the premium cost.

## Acknowledgements

The authors are grateful to Kosali Simon for providing helpful information on state regulations for health insurers. We would also like to thank Jon Gabel, Marsha Gold, and individuals at the Agency for Healthcare Research and Quality, the Center for Economic Studies, and at the 2005 Allied Social Science Associations' session for helpful comments.

Exhibit 1. Percent of Establishments Offering Insurance that Pay 100% of Premium for at Least One Plan

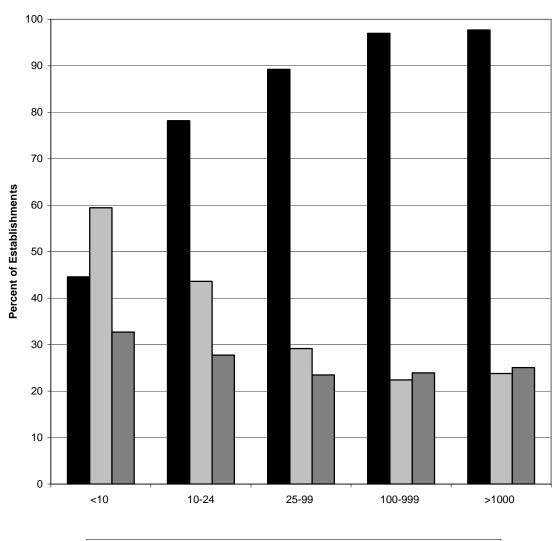


**Source:** Medical Expenditure Panel Survey - Insurance Component (List Sample), sponsored by the Agency for Healthcare Research and Quality.

Exhibit 2. Percent of Establishments that Pay 100 Percent by Establishment Characteristics (2003)								
	% of Estabs Offering 1 Plan that Pay 100% for Single Coverage	% of Estabs Offering 1 Plan that Pay 100% for Family Coverage	% of Estabs Offering >1 Plan that Pay 100% for Single Coverage for at Least 1 Plan	% of Estabs Offering >1 Plan that Pay 100% for Family Coverage for at Least 1 Plan				
TOTAL	51	35	28	16				
Age of firm								
< 5 years	57	40	49	34				
5-9 years	58	42	46	30				
10-20 years	56	41	44	26				
> 20 years	52	34	31	18				
Non-profit status								
Non-profit	58	33	45	22				
For profit	51	35	27	16				
Low wage earners								
≥ 50% of workers	45	32	26	13				
< 50% of workers	56	39	38	23				
Part-time workers								
≥ 50% of workers	46	33	20	10				
< 50% of workers	52	35	30	18				
Union								
≥ 25% of workers	57	54	58	55				
<25% of workers	52	35	27	14				

Source: Medical Expenditure Panel Survey-Insurance Component (List Sample), sponsored by the Agency for Healthcare Research and Quality.

Exhibit 3. Percent of Establishments that Pay 100% for Single Coverage by Size (2003)



- ■% of Estabs Offering Health Insurance with Single Coverage
- ■% of Estabs Offering 1 Plan that Pay 100% for Single Coverage
- ■% of Estabs Offering >1 Plan that Pay 100% for Single Coverage for at Least 1 Plan

**Source:** Medical Expenditure Panel Survey-Insurance Component (List Sample), sponsored by the Agency for Healthcare Research and Quality.

Exhibit 4. Probability that an Establishment Pays 100 Percent in 2003						
	Marginal Effects					
	Single	Family				
Establishment						
characteristics						
Single unit	0.070 ***	0.077 ***				
Firm size						
< 10	0.204 ***	0.153 ***				
10-24	0.061 ***	0.042 ***				
25-99	0.030 ***	0.013 ***				
100-999	0.015 ***	0.001				
Nonprofit	0.081 ***	0.016				
Offer >1 plan	0.021	0.027				
Workforce characteristics						
>= 50% Low wage	0.008	0.041 **				
>= 50% Part-time	-0.011	-0.007				
>= 25% Unionized	0.233 ***	0.267 ***				
** Significant at the 0.01 level						

\*\* Significant at the 0.01 level

\*\*\* Significant at the 0.001 level

Source: Medical Expenditure Panel Survey-Insurance Component (List Sample),
sponsored by the Agency for Healthcare Research and Quality.

Exhibit 5. Health Plan Characteristics by Employer Contributions (2003)										
	One Plan				More Than One Plan					
	Single Coverage		Family Coverage		Single Coverage		Family Coverage			
	Employer	Employer	Employer	Employer	Employer	Employer	Employer	Employer		
	Paying	Not	Paying	Not	Paying	Not	Paying	Not		
	100%	Paying	100%	Paying	100%	Paying	100%	Paying		
		100%		100%		100%		100%		
	Percent of Plans									
Provider Type										
Exclusive	32	26	30	25	36	31	34	32		
Any	15	10	16	9	12	9	12	9		
Mix	54	65	54	66	52	60	54	59		
Premiums										
Low	29	30	36	36	34	28	40	30		
Medium	28	35	25	29	34	44	26	35		
High	43	35	40	36	32	28	34	34		
Self-insured	13	29	14	27	24	58	26	55		
Referral not required	51	58	52	58	51	61	52	60		
Cover pre-existing conditions	53	57	52	58	67	67	67	68		
Cover outpatient Rx	89	94	89	95	93	96	92	96		
Maximum out-of-pocket										
expenses										
Low	31	32	33	29	31	29	22	22		
Medium	32	35	29	34	35	39	42	41		
High	37	33	37	37	34	32	36	37		
No annual maximum	35	30	36	29	35	31	34	33		

**Source:** Medical Expenditure Panel Survey-Insurance Component (List Sample), sponsored by the Agency for Healthcare Research and Quality.

1 - - -

content.healthaffairs.org/cgi/reprint/hlthaff.w2.299v1. J. Gabel, L. Levitt, J. Pickreign, H. Whitmore, E. Holve, D. Rowland, K. Dhont, S. Hawkins, "Job-Based Health Insurance in 2001: Inflation Hits Double Digits, Managed Care Retreats," Health Affairs 20 (2001): 180-186.

<sup>2</sup> J.C. Robinson, "Renewed Emphasis on Consumer Cost Sharing In Health Insurance Benefit Design," *Health Affairs*, 20 March 2002,

content.healthaffairs.org/cgi/reprint/hlthaff.w2.139v1. S.

Trude, J.B. Christianson, C.S. Lesser, C. Watts, A.M.

Benoit, "Employer-Sponsored Health Insurance: Pressing

Problems, Incremental Changes," Health Affairs 21 (2002):

66-75. M.S. Marquis and S.H. Long, "Prevalence of Selected

Employer Health Insurance Purchasing Strategies in 1997,"

Health Affairs 20 (2001a): 220-230.

M. Schiff, M. Schuster, S. Bachman, A. Lischko, "Employee Input and Health Care Cost-Containment Strategies," Managed Care Interface (2003): 20-24. J. Gabel, L. Levitt, E. Holve, J. Pickreign, H. Whitmore, K. Dhont, S. Hawkins, D. Rowland, "Job-Based Health Benefits in 2002: Some Important

<sup>&</sup>lt;sup>1</sup> B.C. Strunk, P.B. Ginsburg, J.R. Gabel, "Tracking Health Care Costs: Growth Accelerates Again in 2001," *Health Affairs*, 25 September 2002,

Trends," Health Affairs 21: (2002): 143-151. J. Gabel, G. Claxton, E. Holve, J. Pickreign, H. Whitmore, K. Dhont, S. Hawkins, D. Rowland, "Health Benefits in 2003: Premiums Reach Thirteen-Year High as Employers Adopt New Forms of Cost Sharing," Health Affairs 22: (2003): 117. <sup>4</sup> J. Gabel, L. Levitt, J. Pickreign, H. Whitmore, E. Holve, D. Rowland, K. Dhont, S. Hawkins, "Job-Based Health Insurance in 2001: Inflation Hits Double Digits, Managed Care Retreats," Health Affairs 2001; 20(5): 180-186. J. Gabel, L. Levitt, E. Holve, J. Pickreign, H. Whitmore, K. Dhont, S. Hawkins, D. Rowland, "Job-Based Health Benefits in 2002: Some Important Trends," Health Affairs 2002; 21(5): 143-151. J. Gabel, G. Claxton, E. Holve, J. Pickreign, H. Whitmore, K. Dhont, S. Hawkins, D. Rowland, "Health Benefits in 2003: Premiums Reach Thirteen Year High as Employers Adopt New Forms of Cost Sharing," Health Affairs 2003; 22(5): 117-126. J. Gabel, G. Claxton, I. Gil, J. Pickreign, H. Whitmore, E. Holve, B. Finder, S. Hawkins, D. Rowland, "Health Benefits in 2004: Four years of Double-Digit Premium Increases Take Their Toll on Coverage, " Health Affairs 2004; 23(5): 200-209. J. Gabel, G. Claxton, I. Gil, J. Pickreign, H. Whitmore, B. Finder, S. Hawkins, D. Rowland, "Health Benefits in 2005: Premium

Increases Slow Down, Coverage Continues to Erode," Health
Affairs 2005; 24(5): 1273-1280.

- 5 T.C. Buchmueller, J. DiNardo, R.G. Valletta, "Union Effects on Health Insurance Provision and Coverage in the United States," Industrial and Labor Relations Review 55 (2002): 610-627. C. Montagne, "Bargaining Health Benefits in the Workplace: An Inside View," The Milbank Quarterly 80 (2002): 547-567. M.S. Marquis and S.H. Long, "Employer Health Insurance and Local Labor Market Conditions,"

  International Journal of Health Care Finance and Economics 1 (2001b): 273-292. L.F. Rossiter and A.K. Taylor, "Union Effects on the Provision of Health Insurance," Industrial Relations 21 (1982): 167-177.
- <sup>6</sup> A.K. Taylor and G.R. Wilensky, "The Effect of Tax Policy on Expenditures for Private Health Insurance," Market Reform and Health Care: Current Issues, New Directions and Strategic Decisions, Jack Myer, Editor. American Enterprise Institute, 1983.
- <sup>7</sup> It is important to keep in mind here that the distribution of establishments is not the same as the distribution of workers. Because many establishments are single-units and small in terms of the number of persons employed, the health benefit decisions made by these employers impact a

small percentage of the workforce. For example, in 2003 about 51 percent of establishments that offered one plan paid 100 percent of the premium cost for single coverage, but only 33 percent of employees at these establishments were offered fully paid single coverage plans. In general, the decline in the percent of employees who worked at establishments that paid 100 percent declined more that the percent of establishments that paid 100 percent for single coverage premiums from 1997 to 2003.

<sup>8</sup> P. Cooper and J. Vistnes, "Workers' Decisions to Take-Up Offered Health Insurance Coverage: Assessing the Importance of Out-of-Pocket Premium Costs," *Medical Care* Vol. 41, No. 7 (July 2003): p. 35-43.

<sup>9</sup> B.L. Crimmel, "Employee Contributions to Employer-Sponsored Health Insurance Coverage, 1997 v. 2002." Statistical Brief No. 55, September 2004, Agency for Healthcare Research and Quality, Rockville, MD.

# http://www.meps.ahrq.gov/papers/st55/stat55.pdf

<sup>&</sup>lt;sup>10</sup> In fact we find that establishments within the same firm do not always make the same level of contributions.

Beginning with survey year 2003, the sampling design was changed and minimum samples were collected that allow for estimates to be made for the private sector for all states.

See Sommers, John P., 2004, "Updates to the Medical Expenditure Panel Survey Insurance Component List Sample Design, 2004." Agency for Healthcare Research and Quality <a href="http://meps.ahrq.gov/papers/workingpapers/WP\_Nov2004\_JS.pdf">http://meps.ahrq.gov/papers/workingpapers/WP\_Nov2004\_JS.pdf</a>

12 J.M. Branscome and B.L. Crimmel, "Changes in Job-Related Health Insurance, 1996-99," Rockville (MD): Agency for Healthcare Research and Quality (2002), MEPS Chartbook No. 10, AHRQ Publication No. 02-0030. J.W. Cohen, et al., "The Medical Expenditure Panel Survey: A National Health Information Resource," Inquiry 33 (Winter 1996/97): 373-389.

<sup>13</sup> Some plans have self-insured indemnification, which means that the employer is assuming the risk for the employees' medical expenses. This is in contrast to purchased plans in which the health insurance company assumes the financial risk for the enrollee's medical claims as defined on the MEPS survey form.

Data is collected on employee-plus-one coverage in some years, but that data is not used in these analyses.

<sup>15</sup> Low wages were defined in the MEPS - IC as less than \$6.50 per hour in 1997 through 1999 and less than \$9.50 per hour beginning in 2000.

<sup>16</sup> We consider an establishment unionized if 25 percent or more of its workforce belongs to a union.

- <sup>18</sup> For example, 62 percent of single unit establishments that offer one plan pay the full premium cost for single coverage, while only 22 percent of multi unit establishments offering one plan pay one percent of the premium cost for single coverage.
- <sup>19</sup> In 2003, only 29 percent of establishments in agriculture/fishing/forestry offered health insurance and only 45 percent of establishments in the construction industry offered insurance.
- Establishments offering only one plan may be characteristically different (e.g., unionization, age of the workforce, size) from those offering more than one plan and these differences may influence the results presented here. This paper, however, does not attempt to analyze the characteristics of establishments by the number of plans offered or the motivations behind the decision of how many plans to offer.
- The first category of plans included health maintenance organizations (HMO), independent physicians associations (IPA), and exclusive provider organizations (EPO). This

<sup>&</sup>lt;sup>17</sup> The pattern is very similar for family coverage.

type of plan required that enrollees go to providers associated with the plan for all non-emergency care in order for the costs to be covered. The second category of provider arrangements included most fee-for-service plans. If enrollees may go to providers of their choice with no cost incentives to use a particular group of providers, this was considered a plan with any provider. Preferred provider organizations (PPO) and point-of-service plans fell into the third category, which was a mixture of preferred and any provider.

Premiums in the low category were greater than \$0 and less than or equal to \$2750 for single coverage and greater than \$0 and less than or equal to \$8000 for family coverage. Premiums in the middle category fell between \$2750 and \$3750 for single coverage and \$8000 and \$10,000 for family coverage. Premiums in the high category were greater than \$3750 for single coverage and greater than \$10,000 for family coverage.

<sup>&</sup>lt;sup>23</sup> Some health insurance plans restrict coverage for medical or health conditions which exist prior to enrollment in the plan.

<sup>&</sup>lt;sup>24</sup> Annual limits on these expenses were categorized as low, medium, or high. Maximum expense limits that were greater

than zero and less than or equal to \$1250 for single coverage and greater than zero and less than or equal to \$2500 for family coverage were categorized as low. If these expense limits were more than \$1250 and less than or equal to \$2000 for single coverage and more than \$2500 and less than or equal to \$4500 for family coverage, they were grouped in the medium category. The high category included maximums that were greater than \$2000 for single coverage and greater than \$4500 for family coverage.

- Our regression analysis showed that unionization had a large, positive impact on the probability that an establishment paid the full cost of health insurance, but such establishments are only a small fraction of the total number that fully paid health insurance premiums.
- J.R. Gabel and J.D. Pickreign, "Risky Business: When Mom and Pop Buy Health Insurance for Their Employees," New York (NY): The Commonwealth Fund (2004), Issue Brief #772. D.G. Cave and L.J. Tucker, "How Will Employers Manage Employee Risk Selection Among Health Plans in the 1990s?" Benefits Quarterly 6 (1990): 1-13.
- D.M. Cutler, "Employee Costs and the Decline in Health Insurance Coverage," Cambridge (MA): National Bureau of Economic Research (2002), NBER Working Paper Series 9036.

J.R. Gabel, J.D. Pickreign, H.H. Whitmore, C. Schoen,

"Embraceable You: How Employers Influence Health Plan

Enrollment," Health Affairs 20 (2001): 196-208. T. Rice,

K. Desmond, N. Purat, "Dark Clouds in Pleasantville: Trends
in Job-Based Health Insurance, 1996-1998," Presentation at
the Association of Health Services Research annual meeting,

Chicago, June 1999. P.F. Cooper and B.S. Schone, "More

Offers, Fewer Takers for Employment-Based Health Insurance:
1987 and 1996," Health Affairs 16 (1997): 142-149.

28 L.J. Blumberg, "Who Pays for Employer-Sponsored Health
Insurance?" Health Affairs 18, no. 6 (1999): 58-61.

29 Here are examples from California and Wisconsin:

http://www.dmhc.ca.gov/library/statutes/knoxkeene/html/\_ 1357\_03\_marketing\_of\_plans\_to\_small\_employers\_
participation.htm; http://oci.wi.gov/sm\_emp/h\_reqsmemp.htm